DOCUMENT RESUME

ED 035 906 CG 004 879

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TITLE SEATING CHOICE AS A FUNCTION OF ATTITUDINAL SIMILARITY--DISSIMILARITY. RESEARCH MEMORANDUM.
INSTITUTION EDUCATIONAL TESTING SERVICE, PRINCETON, N.J.; PURDUE UNIV., LAFAYETTE, IND.; SOUTHWESTERN PSYCHOLOGICAL ASSOCIATION, AUSTIN, TEX.
REPORT NO RM-69-16
PUB DATE MAY 69
NOTE 19P.; PAPER PRESENTED AT SOUTHWESTERN PSYCHOLOGICAL ASSOCIATION CONVENTION, AUSTIN, TEXAS, APRIL 17--19, 1969

EDRS PRICE EDRS PRICE MF-$0.25 HC-$1.05
DESCRIPTORS ATTITUDES, *BEHAVIORAL SCIENCE RESEARCH, *COLLEGE STUDENTS, CONFLICT, FEMALES, *INTERPERSONAL RELATIONSHIP, MALES, *STUDENT ATTITUDES, *STUDENT CHARACTERISTICS, STUDENTS

ABSTRACT

THIS STUDY WAS DESIGNED TO TEST THE HYPOTHESIS THAT SUBJECTS WILL PREFER TO SIT NEARER TO AN AGREEING STRANGER THAN TO A DISAGREEING STRANGER. A SECOND PURPOSE WAS TO PROVIDE A BEHAVIORAL AND AN UNOBTRUSIVE MEASURE OF INTERPERSONAL ATTRACTION. SUBJECTS WERE 40 COLLEGE STUDENT VOLUNTEERS FROM AN INTRODUCTORY PSYCHOLOGY COURSE. EACH SUBJECT WAS ASSIGNED TWO CONFEDERATES WHO POSED AS STUDENTS FROM ANOTHER CLASS. ONE CONFEDERATE WAS GIVEN PRIOR INSTRUCTIONS TO AGREE WITH THE SUBJECT ON ALL BUT TWO OF THE SUBJECTS' ATTITUDINAL STATEMENTS, THE OTHER CONFEDERATE WAS TOLD TO DISAGREE ON ALL BUT TWO. THE SUBJECTS WERE THEN GIVEN INSTRUCTIONS FOR SEATING. THE MALES FAILED TO SHOW A PREFERENCE TO SIT NEARER THE AGREEING CONFEDERATE. RESULTS SHOW THAT: (1) FEMALES PREFER TO SIT NEARER A PERSON WHO AGREES WITH THEM, THAN ONE WHO DISAGREES WITH THEM; AND (2) MALES RESPOND TO BOTH ATTITUDINAL SIMILARITY AND TO THEIR PERSONAL FEELINGS ABOUT OTHERS IN DETERMINING THEIR LOCATION WITH RESPECT TO OTHERS. (AUTHOR/KJ)

EDO 35906

RESEARCH MEMORANDUM

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SEATING CHOICE AS A FUNCTION OF ATTITUDINAL SIMILARITY-DISSIMILARITY

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Paper presented at the meetings of the Southwestern Psychological Association, Austin, Texas, April 1969.

CG004 879

Educational Testing Service
Princeton, New Jersey
May 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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SEATING CHOICE AS A FUNCTION OF ATTITUDINAL SIMILARITY-DISSIMILARITY[1]

There have been several approaches to using distance as a variable in the study of interpersonal processes. For example, Little (1965) conducted two experiments in which he studied the distance with which his subjects separated line drawings, stylized silhouettes, or real people. The stimuli were described as representing friends, acquaintances, or strangers. He found that friends were placed closest together, acquaintances next, and strangers were placed farthest apart. He also found that strangers were typically separated by 30 to 48 inches while friends were typically 18 or less inches apart. As Little points out, his results apply only to American college students, since Hall (1955) has indicated that the distance separating individuals is also a function of cultural background. Sommer (1959) has used chairs to measure distance between individuals and has found that subjects generally prefer to sit across from one another for conversational purposes. However, if the distance is too great for comfortable conversation or when the distance exceeds that of a side-by-side arrangement, the latter will be preferred.

Sommer (1967) suggested that the relationship between similar attitudes and distance was open to debate since conflicting results have been obtained. Little, Ulehla, and Henderson (1965) found partial evidence to suggest that pairs of Ss who were Goldwater supporters were expected to be closer together than either Johnson-Goldwater or Johnson-Johnson pairs. However, Elkin (1964) found no differences between college student pairs who were either similar or dissimilar in attitude toward medicare. Mehrabrian (1968) found that the distance between a communicator and an addressee

could be used as an index of the subject's liking for the addressee. The distance was a decreasing linear function of liking.

In a series of studies, Byrne's laboratory (Byrne, 1961; Clore & Byrne, in press) has consistently demonstrated that attraction, as measured by a paper and pencil questionnaire, is a positive linear function of the proportion of attitudinal similarity-dissimilarity expressed between a subject and a stranger. This basic paradigm also presents a method of exploring the relationship between attitudes and distance. Specifically, since attraction is directly related to attitudinal similarity and since the spatial distance chosen is inversely related to friendship, one would expect distance to be a decreasing linear function of the proportion of similar attitudes.

The present study was designed to test the hypothesis that subjects will prefer to sit nearer to an agreeing stranger than to a disagreeing stranger. A second purpose was to provide a behavioral and, hopefully, an unobtrusive measure of interpersonal attraction.

Method

The first 20 males and 20 females who volunteered from a summer session of introductory psychology at the University of Texas served as Ss for the present experiment. Each S participated with two undergraduate confederates who were the same sex as the S and who posed as students from another introductory psychology class. Each participant in the experimental setting was introduced by the E and the following instructions were given:

> In this experiment, we are interested in knowing if people can make accurate and valid judgments about each other on the basis of knowing some of the other person's attitudes. In previous research here at the University, we have found that a person can make accurate judgments about a same sexed stranger's intelligence, knowledge of

> current events, morality, and adjustment just on the basis of knowing many of the stranger's attitudes. We are interested in this experiment in knowing if people can make these same judgments about a stranger on the basis of knowing a few of the person's attitudes. For this experiment, each of you will rate the others on these dimensions. We will draw to see who goes first in reading their attitudes. The person who draws the number one will be first; number two goes second, and number three goes last. When you judge the other persons, your judgments will be completely confidential, and, let me stress, no one other than myself will see your judgments.

After the participants had drawn the slip of paper indicating the order of reading their attitudes, they were given a 24-item, six-step, Likert-type scale called the Survey of Attitudes (SA), and the slips of paper were collected by the E. All the slips chosen by the participants contained the number one, thus insuring that the S would read his attitudes first. The confederates alternated being the second or third reader. The SA contained topics ranging from liking of classical music, novels, and dancing, to belief in God, the American way of life, integration, the draft, and the S's choice of political parties.

Prior to each session the confederates received instructions either to agree or disagree with the S on all but two randomly selected attitudinal statements. Each S, therefore, was confronted with a peer who agreed with him on 22 statements and disagreed on two statements, and one who disagreed on 22 statements and agreed on two statements. The agreement and disagreement patterns were random for each confederate and for each experimental session. Each confederate played the agreeing confederate role for half of the Ss and the disagreeing confederate role for the other Ss.

For this experiment, the confederate's agreeing responses were to be (a) on the same side of the neutral point as S's response, and (b) one scalar step away from S's response. Disagreement was defined as being three scalar steps away from the S's statement and thus was on the opposite

side of the neutral point. Defining agreement and disagreement in this manner holds the amount of discrepancy each S experiences constant, since Nelson (1965) found that Ss respond to both similarity and to discrepancy.

After the order of reading their attitudinal statements had been determined, the E explained that he would read the title for each attitude and that the Ss were to read aloud the statement which best described their attitude. The E also instructed the Ss not to communicate beyond reading the best fitting attitudinal response. As the S and the confederates read their responses, the E recorded them.

After all 24 attitudes had been read, the E told the participants that in order to keep the judgments confidential, two of the Ss would be asked to go into the other part of the experimental room and sit far apart. The E then selected the two confederates and asked the real S to remain in the room and to sit at a table in the corner (see Figure 1 for a diagram of the experimental room). Typically, this corner was where the S was initially sitting, hence the S would remain seated where he was. Before the confederates left, all the participants were reintroduced by both their first name and the order in which they read their responses, and received two Interpersonal Judgment Scales (IJS, Byrne, 1961) on which the E had written the names of the other two participants. The S and the confederates were instructed to evaluate the person whose name appeared on the IJS, and were again told that their judgments would be confidential.

The responses to the last two items on the IJS have been used as a measure of interpersonal attraction. This measure has been found to be sufficiently reliable (Byrne & Nelson, 1965). These two questions ask for the S's personal feelings about the other person and about his

desirability as a lab partner. Each is marked on a seven step Likert-type scale.

As can be seen in Figure 1, the area to which the confederates went contained six chairs arranged in a wide semicircle. The confederates sat in the chairs second to the end, thus leaving two seats between them. Each confederate sat on one side of the room for half of the Ss, and the agreeing confederate role was counterbalanced for each side of the room regardless of which confederate played that role. The Ss were rather isolated as they filled out the IJS, and could not see the area where the confederates were seated.

Insert Figure 1 about here

After sufficient time had elapsed for the evaluations onthe IJS to be completed, the S was asked to join the other people so that the E could explain the nature of the experiment. It was explained that since computer dating was not working as well as had been hoped, the experiment was an attempt to find out how the attitudes of people influence their evaluations of others and how they are themselves evaluated. The Ss were asked not to discuss the experiment with others from their classes and questions were answered if the S had any. However, the fact that there were confederates or that the seat chosen by the S was of interest to the E was not discussed.

The dependent variable in the present experiment was the seat chosen by the S, in particular, his location with respect to the confederates. The S had four choices, and distance, as measured by the seat chosen, was used as a behavioral measure of attraction. Choice of an inner seat was assumed to indicate a mild preference for one confederate over the other, since in

that position the S was only slightly closer to one than the other. The extreme seats presumably indicate a strong preference for the closer confederate since the distance to the other confederate is maximized. There was no neutral seat available since any seat chosen was closer to one confederate than the other.

Results

Table 1 shows the seating preference for the Ss. Analyzing the male data by chi-square and comparing the number of Ss choosing the agreeing confederate versus the number choosing the disagreeing confederate produced

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Insert Table 1 about here

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a chi-square value of 0.8 which, with one degree of freedom, is not significant. The same comparison for females, however, shows a significant preference for the agreeing confederate (chi-square = 7.2, 1 d.f., $p < .01$). Comparing the preference for the males versus the females by confederate chosen produces a significant chi-square ($\chi^2 = 5.33$, 1 d.f., $p < .05$), thus suggesting that there is a sex by confederate-preference interaction. The final chi-square comparison, that between the inner versus the extreme seat across both sexes, shows that there is a strong preference for the inner seats (chi-square = 14.4, 1 d.f., $p < .001$).

For both sexes, neither confederate was selected more often than the other. Table 2 presents the attraction ratings for the agreeing and disagreeing confederates. As expected, both sexes show a decidedly greater

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Insert Table 2 about here

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attraction toward the agreeing confederate. For the females, the attraction

ratings for the two confederates tended to be correlated ($r = .32$), but the males did not show this tendency ($r = .01$).

Since the males failed to show a preference to sit nearer the agreeing confederate, one possible explanation might be that there was a difference in attraction expressed toward the confederate roles which was being reflected in the seat chosen. Therefore, the males were divided into two groups based on whether the agreeing or disagreeing confederate was chosen. The attraction ratings were compared for both the agreeing confederate and for the disagreeing confederate for those groups. Table 3 presents the mean attraction ratings given to the confederate roles and the resulting statistical comparison. Those males who preferred to sit nearer the disagreeing confederate tended to show less attraction toward the agreeing confederate than those

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Insert Table 3 about here

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who sat nearer the agreeing confederate ($t = 1.75$, $p < .10$). That is, those male Ss who saw the agreeing confederate as less attractive tended to prefer to sit nearer the disagreeing confederate.

Discussion

The results of the present experiment show that females prefer to sit nearer a person who agrees with them than one who disagrees with them. Males, however, fail to show any preference. One possible source of this failure of the males is in the attraction expressed toward the agreeing confederate, that is, those males sitting near the disagreeing confederate were less attracted toward the agreeing confederate than those sitting nearer the agreeing

confederate. The agreeing confederate was seen as more attractive. The attraction ratings of the agreeing confederate suggest that in order to predict which seat the male Ss will choose, one must take into account slight differences in their personal feelings toward the confederates.

However, since the above interpretation depends upon an analysis that was suggested by the data, other interpretations cannot be ruled out. One way to look at the obtained sex differences is to consider them as response differences between the sexes. Sommer (1967, p. 149) wrote that experiments by Elkin (1964), Norum (1966), and Sommer (1959) "found that females make more use of the side-by-side arrangement than do males. Side-by-side seating, which is generally considered to be the most intimate of all seating arrangements for people already acquainted, is relatively rare among males if they are given the opportunity to sit across from one another." (Italics added.) Furthermore, relationships for females tend to be more cooperative and socially oriented whereas for males, relationships tend to be more competitive (Vinake & Gullickson, 1964). Argyle (1967, p. 35) wrote "People cooperating tend to sit side by side, those competing sit facing each other." Therefore, the failure of the males to choose the agreeing confederate has some validity as a sex difference.

This experiment does shed light on the question of the extent to which similar attitudes produce greater physical proximity. Females are very much affected by attitudinal agreement, generally rejecting those who disagree and preferring to be nearer those who agree with them. Males, however, respond to both attitudinal similarity and to their personal feelings about others in determining their location with respect to others. Furthermore, since males tend to be more competitive, they prefer a face-to-face position rather than

a side-by-side position. In this experiment, sitting near the disagreeing confederate also placed the S in a more face-to-face position. The most extreme seat was the most face-to-face, and four males chose that seat while only two females chose it.

Another suggestion concerning the sex difference is that perhaps the males were becoming aware of the similarity manipulation. Baskett (1969) suggested that Ss may become suspicious of extremely disagreeing strangers, and Stricker, Messick, and Jackson (1967) presented evidence showing that males were more suspicious than females during a conformity type experiment. If the males in the present experiment were becoming suspicious of the disagreeing confederate, and as a result failed to believe the attitudinal statements expressed by him, then the disagreeing confederate could have been perceived as a part of the experiment or perhaps as rebelling against the experiment. If either of these possibilities were true, it would be predicted that the males would perform at an essentially random level. In fact, their overall seating choice was not significantly different from chance.

One possible way to make the similarity manipulation less noticeable might be to use confederates who agree more often, at least 30% of the time, than the extremely disagreeing confederate used in the present experiment.

Some anecdotal evidence was also recorded. For instance, one of the males went out of his way to speak to the agreeing confederate (after sitting next to him) and said "Nice to meet you John," and shook that confederate's hand. This male made no attempt to communicate with the disagreeing confederate. Another source of evidence became apparent after many of the Ss had

been run. Referring back to Figure 1, the experimental room was on a floor which had only two exits. The confederates alternated taking one of the two exits and, after the S was no longer near, returned to the experimental room. The S had to use one of the two exits. It became apparent that the exit chosen by the S might be another measure of attraction. Since the females as a group tended to be run after the males, the records are more complete for them. One female asked the disagreeing confederate about an elevator, but in general the females followed and/or spoke only to the agreeing confederate. Once this became apparent, the confederates were instructed to bait the Ss by asking general questions about the experiment if the S spoke to them. Although the data are far from being complete, the comments typically downgraded the disagreeing confederate. One female said that she hated people like that, who always disagreed with her on everything.

The second purpose of the experiment was also fulfilled. The Ss seemed unaware of the E's interest in the distance measure during debriefing or during any other meeting with either the confederates or the E. Several Ss came by to see the E after the experiment had been completed, at which time the distance measure was explained to the Ss. None of them expressed any awareness of the manipulation.

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Footnote

[1]The authors would like to thank John Massey, Keith Kieke, Dinah Baskett, and Gayle Wiener, who served as confederates for the experiment.

Table 1

Frequency of Confederate Choice by Sex and by Distance

		Inner Seat (near)	Outer Seat (far)	Total
Males	A-choice	7	1	8
	D-choice	8	4	12
Females	A-choice	15	1	16
	D-choice	2	2	4

Table 2

Mean Attraction Ratings for the Agreeing and Disagreeing Confederate

	Agreeing Confederate	Disagreeing Confederate	d.f.	t
Males	11.65	7.20	19	6.61***
Females	11.30	6.55	19	7.56***

***$p < .001$

Table 3

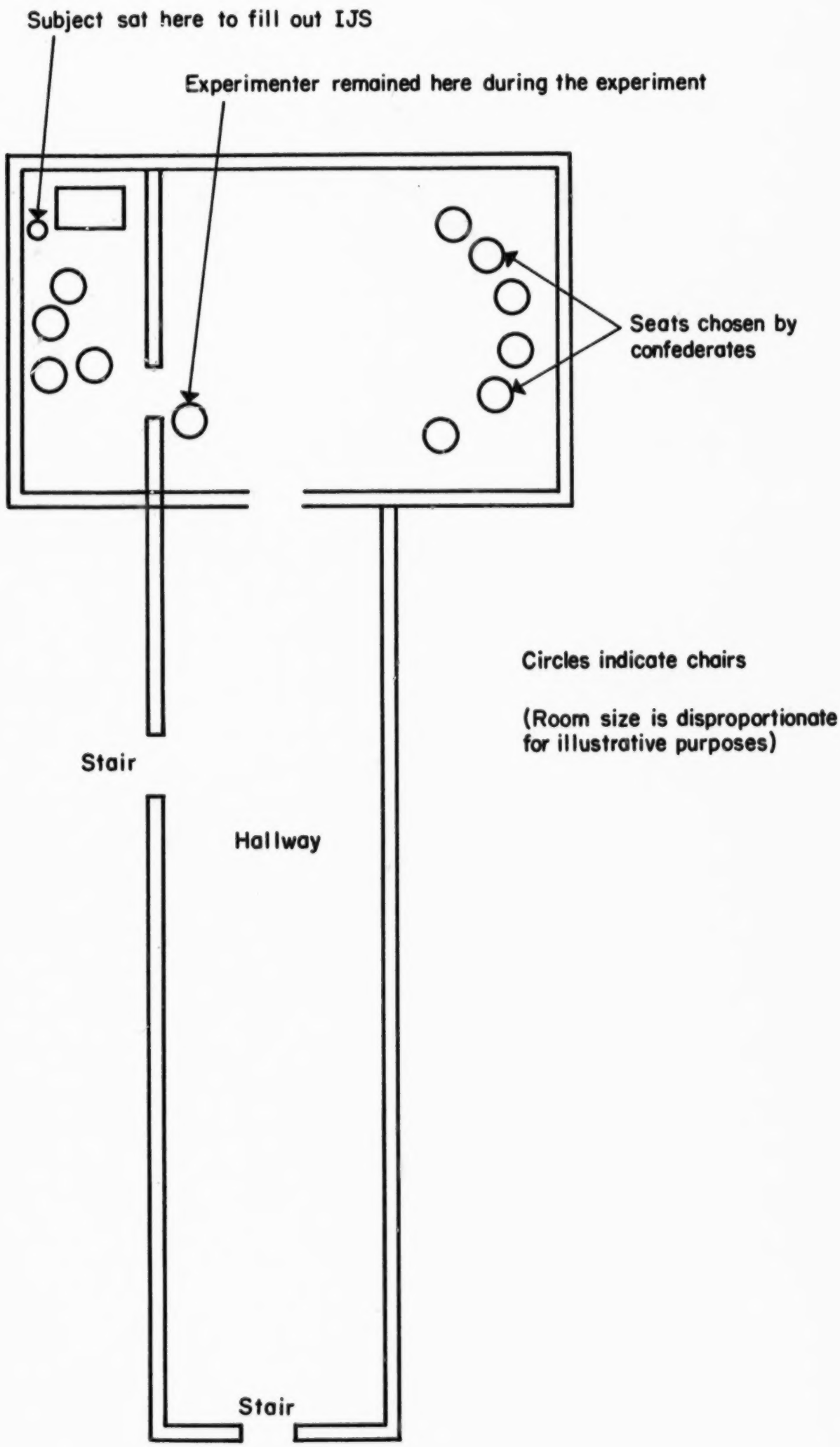
Mean Attraction Ratings Assigned to the Confederates as a Function of the Confederate Chosen

Role	Seat Choice: Agreeing Confederate	Seat Choice: Disagreeing Confederate	d.f.	t
Agreeing Confederate	12.13	11.33	19	1.75*
Disagreeing Confederate	8.00	6.67	19	1.06

*.05 < p < .10

Figure Caption

Fig. 1. Experimental area.


Subject sat here to fill out IJS
Experimenter remained here during the experiment
Seats chosen by confederates
Circles indicate chairs
(Room size is disproportionate for illustrative purposes)
Stair
Hallway
Stair